March Air Force Base NPL/BRAC 1993

Size: 6.545 acres

Mission: Maintain, repair, and refuel aircraft

HRS Score: 31.94; placed on NPL in November 1989

IAG Status: Federal Facility Agreement signed in September 1990

Contaminants: VOCs, petroleum/oil/lubricants, and PCBs

Media Affected: Groundwater and soil

Funding to Date: \$133.4 million

Estimated Cost to Completion (Completion Year): \$22.2 million (FY2021)

Final Remedy in Place or Response Complete Date for BRAC Sites: FY2005

Final Remedy in Place or Response Complete Date for Non-BRAC Sites: FY2001



## Riverside, California

## **Restoration Background**

In July 1993, the BRAC Commission recommended that March Air Force Base undergo realignment. It was recommended that the installation serve as an Air Reserve Base once realignment was completed. Base realignment was accomplished in April 1996.

Environmental studies at the installation began in FY84. A Preliminary Assessment and Site Inspection identified 28 sites, including three fire training areas, seven inactive landfills, several underground storage tanks, an engine test cell (Site 18), sludge drying beds at a sewage treatment plant, and various spill sites.

March is a joint-use base which uses both BRAC and Environmental Restoration Account funds to reach cleanup goals. For a basewide project, such as an Environmental Inpact Statement, the costs are evenly divided. Additional projects that are within defined boundaries are paid from the account affected.

An Engineering Evaluation and Cost Analysis, a Removal Action, and a groundwater extraction and treatment system were completed to prevent off-base migration of contaminated groundwater. The installation also began a Removal Action for the Panero hydrant refueling system and treatment of contaminated soil. In FY91, sites were grouped into three operable units (OUs).

In FY94, generic remedies, including modified RCRA caps and stream modifications, were initiated at some landfill sites. Modified vapor extraction and recovery systems were used to clean up contaminants in soil and groundwater. The technical review committee was converted to a Restoration Advisory

Board. The installation also completed an Environmental Baseline Survey

In FY95, Removal Actions were conducted at five sites, and two landfills were closed. A soil vapor extraction pilot system was installed at Site 31 (Solvent Spill), and an air-sparging system wasinstalled at Site 18. The installation continued long-term monitoring at OU1 and OU3.

A Record of Decision (ROD) for OU1 was signed in FY96. Remedial Actions (RAs) involving construction of a dual-phase treatment system for groundwater trichloroethene (TCE)-contaminated soil began for Site 31 and the related groundwater plume at OU1. Six landfill sites on the western part of the base were cleaned up. The debris was consolidated at Site 6, allowing the Local Redevelopment Authority unrestricted use of an additional 100 acres. Interim Removal Actions (IRAs) were completed at Site 25 and continued at two sites within the flight line.

In FY97, the draft final Remedial Investigation and Feasibility Study (RI/FS) was submitted, and the Proposed Plan (PP) and ROD for OU2 were completed. Remedial Design (RD) began for a combined treatment facility for Sites 2, 8, and 27. The IRA at Site 30 was completed. Indicator analytes were used in groundwater sampling to expedite site characterization.

## **FY98 Restoration Progress**

The draft basewide RI/FS was submitted, and fieldwork began on selected approved portions. The OU2 PP was approved and the draft final ROD forwarded to the remedial project managers for review. Basewide groundwater monitoring in support of the OU1 ROD and the OU2 and OU3 Removal Actions continued. The

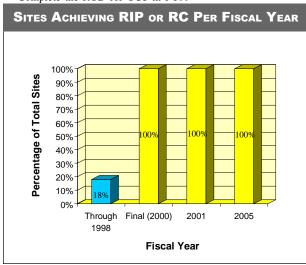
Groundwater Technical Working Group established requirements for obtaining Operating Properly and Successfully (OP&S) approval from EPA for the OU1 groundwater treatment facility. Upgraded groundwater treatment facilities were installed at Sites 33 and 18. Source investigation was completed at Sites 2, 8, and 27

The installation began removing wells at bioventing sites. This process was not completed, because of contractor delays. Contract negotiations delayed initiation of lead shot removal at the isolated shooting range. EPA and the state EPA requested reconsideration of the proposed RD and RA in conjunction with OU3 groundwater approval. Remedial construction was delayed at the request of EPA and the state EPA.

Modeling and a Treatability Study (TS) were completed for OU2. EPA and the state EPA required a revised sampling and analysis plan before review of the TS. All basewide documents have been delayed until this plan is completed.

## Plan of Action

- Continue field activities in support of the basewide RI/FS
- Obtain approval for the OU2 ROD
- Continue groundwater monitoring in support of the OU1 ROD
- Complete requirements for EPA OP&S approval
- Obtain approval of Memorandum of Agreement between Air Force Reserve Command (AFRC) and Air Force Base Conversion Agency (AFBCA) for transferring majority of environmental responsibility
- · Complete the ROD for OU3 in FY99



Air Force